

REMARKS

Applicants respectfully request entry of the remarks submitted herein. Independent claims 14, 26, 27 and 32 have been amended herein for clarification purposes as explained further below, and claims 16-18 have been canceled herein without prejudice to continued prosecution.

Applicants thank the Examiner for the telephone call of September 2, 2011, in which the pending claims were discussed as well as the current rejections against such claims. Applicants appreciate the opportunity to discuss some of the differences between the claimed process and the process disclosed in the reference cited against the pending claims (i.e., Beauregard et al.), and Applicants appreciate the discussion regarding possible claim amendments that might clarify these differences. As indicated herein, independent claims 14 and 27 have been amended to require that the turbulating (claim 14) or spraying (claim 27) step and the drying step occur simultaneously via the gas stream. As discussed during the September 2, 2011, telephone call, this is supported by Applicants' specification (see, for example, page 5, lines 25-28). The remarks below expand upon the differences between the claimed process and the process disclosed in Beauregard et al. that were discussed during the September 2, 2011, telephone call.

Claims 14, 20-23, 26-30 and 32-37 are currently pending. Reconsideration of the pending application is respectfully requested.

The Objections to the Claims

Claims 16 and 17 stand objected to under 37 CFR 1.75(c) as being of improper dependent form. According to the Examiner, claims 16 and 17 do not further limit the subject matter of claim 14.

Without acquiescing to the Examiner's rejection, claims 16 and 17 have been canceled herein without prejudice to continued prosecution. Accordingly, Applicants respectfully submit that the objection to claims 16 and 17 is moot.

The 35 U.S.C. §112 Rejections

Claims 14-26 stand rejected under 35 U.S.C. §112, second paragraph, as the Examiner asserted that those claims are indefinite. According to the Examiner, claim 14 recites “the gas” in line 6, but there is insufficient antecedent basis for this limitation.

Without acquiescing to the Examiner's rejection, claim 14 has been amended herein to replace the first instance of “air” with “gas”. This amendment makes the claim language consistent and provides correct antecedent basis for the terms “gas” and “air”. In view of the amendments herein, Applicants respectfully request that the rejection of claims 14-26 under 35 U.S.C. §112, second paragraph, be withdrawn.

The 35 U.S.C. §103 Rejections

Claims 14, 16-18, 20-23, 26-30 and 32-37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Beauregard et al. (US Patent No. 6,458,401). According to the Examiner, Beauregard et al. discloses a process for preparing crystalline maltitol with maltitol granules and maltitol syrup that is substantially similar to that presently claimed (OA at page 4). Applicants respectfully traverse this rejection with respect to the pending claims.

As discussed during the September 2, 2011, telephone call, the claimed process does in a single step and, thus, in a single piece of equipment (i.e., a fluid bed) what Beauregard et al. does in two steps and in two pieces of equipment. That is, the mixing in Beauregard et al. occurs in an open receptacle (see, for example, column 2, lines 40-49) and the drying occurs in a fluidized bed reactor (see, for example, column 4, lines 65-67). As indicated herein, the independent claims have been amended to require that the turbulating or spraying step and the drying step occur simultaneously in the fluid bed. These features of the claimed process result in high yields of solidified maltitol without the need for an expensive spray-drying step (see, for example, page 2, lines 15-17).

Also as discussed during the September 2, 2011, telephone call, Beauregard et al. discloses that the granules of maltitol are further matured to increase their crystallinity (see, for example, column 3, lines 41-42). Beauregard et al. discloses that maturing can be achieved by keeping the granules moving at a temperature below the melting point of the granules for from 1 to 20 hours in a current of air (see, for example, column 3, lines 43-46). This is also described in

Example 1 of Beauregard et al., which discloses that granules are matured by completion of the crystallization in a ripening device (e.g., an elongated rotating drum), and *then* the matured granules are transferred to a fluidized bed and dried (see, for example, column 4, lines 62-67). On the other hand, the claimed process requires that the turbulating or spraying step and the drying step occur simultaneously; that is, the claimed method requires no additional crystallization to obtain the final produce. This feature of the claimed process also contributes to the benefits described above.

As indicated in Applicants' specification, an "essential feature of the current process is the fact that the quantity of the powder is \geq quantity of the syrup" (page 5, lines 5-6). Applicants note that this is an important feature because it ensures that there is always enough material to allow the granulation, agglomeration and/or coating with the maltitol syrup. In addition, Applicants' specification indicates that the "temperature of the turbulating gas is very important...and has to be selected such the maltitol powder remains solid and is not converted into a liquid syrup" (page 5, lines 11-17). Applicants note that this is an important feature because it ensures that there is effective contact with the maltitol syrup and the surface of the crystals, which results in a fast and efficient process that produces excellent yields. Applicants note that it is the combination of all these features (e.g., the ratio of the powder versus syrup, the temperature of the gas, and the turbulation of the gas) that allows for efficient production of high yields.

In summary, there is nothing in the disclosure of Beauregard et al. that would prompt one of ordinary skill in the art to modify their method in the significant ways indicated above to arrive at the claimed methods. Thus, the claimed methods are not obvious over Beauregard et al., and Applicants respectfully request that the rejection of claims 14, 16-18, 20-23, 26-30 and 32-37 under 35 U.S.C. §103 be withdrawn.

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CONCLUSION

Applicants respectfully request that claims 14, 20-23, 26-30 and 32-37 be allowed. If a telephone call to the undersigned would expedite prosecution, the Examiner is encouraged to do so. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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